

# PATENT COÖPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>P 2003 01887 WO</b>	<b>FOR FURTHER ACTION</b> <small>see Form PCT/ISA/220 as well as, where applicable, item 5 below.</small>	
International application No. <b>PCT/DK2005/000014</b>	International filing date (day/month/year) <b>12/01/2005</b>	(Earliest) Priority Date (day/month/year) <b>23/01/2004</b>
Applicant  <b>LM GLASFIBER A/S</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

**A METHOD OF MANUFACTURING A BLADE FOR A WIND TURBINE AND BLADE COMPRISING SEGMENTED CONDUCTOR MEANS**

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/DK2005/000014

### Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A method of manufacturing a fibre-reinforced blade for a wind energy plant is presented, which blade is configured with at least a blade shell and means for conducting to a lightning current to an earth connection. Novel aspects of the method comprise that the blade is provided with segmented conductor means that are configured for conducting a lightning current outside the blade to the means for conducting to earth; and wherein the conductor means are distributed and secured at the external surface of the blade shell in such a manner that the conductor means are essentially flush with the external surface of the blade shell. When the segmented conductor means are distributed and attached at the external surface of the blade shell, the lightning current will not have to be conducted through the conductor means, but rather they are conducted in a ionised passage in the air above the conductor means.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/DK2005/000014

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 F03D11/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 F03D B64D B29C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/77527 A (JOMITEK APS; JOHANSEN, OLUF, PETER, KAAD; SOERENSEN, TROELS) 18 October 2001 (2001-10-18) page 9, line 18 - page 10, line 17 page 10, line 30 - page 11, line 15 -----	1,14-16, 18-24
Y		5,6
X	US 6 457 943 B1 (OLSEN KAJ ET AL) 1 October 2002 (2002-10-01) cited in the application column 2, line 10 - line 43; figures 1,2 -----	1,15-20, 22,23,25
X	DE 197 48 716 C1 (AERODYN ENGINEERING GMBH, 24768 RENDSBURG, DE) 12 November 1998 (1998-11-12) column 1, line 34 - line 44; figures 1,4b,5 -----	1-3,15, 22,25
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

26 April 2005

Date of mailing of the international search report

03/05/2005

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/DK2005/000014

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 612 810 B1 (OLSEN KAJ ET AL) 2 September 2003 (2003-09-02) column 3, line 55 - column 4, line 39 column 5, line 33 - line 40 -----	1,22
Y	US 4 237 514 A (CLINE ET AL) 2 December 1980 (1980-12-02) figures 2,3 column 2, line 40 - column 3, line 18 -----	5
Y	EP 1 011 182 A (MINNESOTA MINING AND MANUFACTURING COMPANY) 21 June 2000 (2000-06-21) paragraphs '0014!, '0035!, '0004! - '0050! -----	6
A	US 2 982 494 A (AMASON MYRON P) 2 May 1961 (1961-05-02) column 4, line 34 - line 42 -----	5,15
A	US 5 841 066 A (BOCHERENS ET AL) 24 November 1998 (1998-11-24) column 3, line 17 - line 27 -----	5,10,15, 20
A	EP 0 718 495 A (AUTOFLUG ENERGIETECHNIK GMBH + CO) 26 June 1996 (1996-06-26) column 5, line 49 - column 6, line 6 -----	1-25

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/DK2005/000014

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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